

| Plate 1 - Row A |          |             |            |                          |                          |
|-----------------|----------|-------------|------------|--------------------------|--------------------------|
| Plate #         | Position | Primer Name | Chromosome | Forward primer           | Reverse primer           |
| 1               | A1       | umc 2100    | 1          | AAAGGCATTATGCTCACGTTGATT | TGACGTGCAAACAACCTTCATTAC |
| 1               | A2       | umc 1354    | 1          | GATCAGCCCGTTGAGCAAGTT    | GAGTGGAGGCGGAGGATCTG     |
| 1               | A3       | umc1282     | 1          | TACACTACAGACTCCCAACAGGA  | GCGAGGGTCTTTCCATAGAGAAT  |
| 1               | A4       | umc1292     | 1          | GAAGTGGGGAACATGGTTAATGTC | TCACGGTTCAGACAGATACAGCTC |
| 1               | A5       | umc1353     | 1          | AGACAGGATCATCGAAAACACACA | ACCTCAGCCTCCTCGTCAACTACT |
| 1               | A6       | umc1071     | 1          | AGGAAGACACGAGAGACACCGTAG | GTGGTTGTCGAGTTCGTCGTATT  |
| 1               | A7       | umc1160     | 1          | CGTTTGATATGATGTGGAGATTCG | AAGCTTGTGAATGTTCTGGATGTC |
| 1               | A8       | umc1177     | 1          | CGTGTACCGCTCCTCTATAGTCGT | AAGTGGCCGAATTCATCCTTTATT |
| 1               | A9       | umc1222     | 1          | CTCAGAACAGAAGCCATCAAAAGC | CGTCTTCGTGAGAGACATCCTGT  |
| 1               | A10      | umc1269     | 1          | TATATTAGAGGCACCTCCCTCCGT | AGCTGCTTCAGCGACTTTGG     |
| 1               | A11      | umc1363     | 1          | TGTTTAAGTGTGGCAGAAAGCAA  | TCTCCCTCCCCTGTACATGAATTA |
| 1               | A12      | umc2012     | 1          | CTTGCATTGAACGACGACCTG    | CGTACGCTTGCAATGCTTCTCT   |

| Plate 1 - Row B |     |          |   |                          |                          |
|-----------------|-----|----------|---|--------------------------|--------------------------|
| 1               | B1  | bnlg1429 | 1 | CTCCTCGCAAGGATCTTCAC     | AGCACCGTTTCTCGTGAGAT     |
| 1               | B2  | umc1070  | 1 | GGTCTCTCTATCGTCCGGTGAGTA | CCGGAGATGGGAAAGAAGATAAC  |
| 1               | B3  | umc1166  | 1 | CGATCAGATCATACACAACCTTGC | GAGGATCGATTCTTGCCGAGT    |
| 1               | B4  | umc1568  | 1 | AAGTCCAGCCAAGTTCATCAAAGA | ACTGTAACATAAAGTGGGTGTGCC |
| 1               | B5  | umc1976  | 1 | TGCCGAGGCTTCTAGTAGACCAA  | CGCTATATCTATCCCGCAGCAAC  |
| 1               | B6  | bnlg182  | 1 | AGACCATATTCCAGGCTTTACAG  | ACAACCTAGCAGCAGCACAAAG   |
| 1               | B7  | bnlg1866 | 1 | CCCAGCGCATGTCAACTCT      | CCCCGGTAATTCAGTGATA      |
| 1               | B8  | umc1073  | 1 | CACCAACGCCAATTAGCATCC    | GTGGGCGTGTCTCCTACTACTCA  |
| 1               | B9  | umc1701  | 1 | GCGGCAGTACAACACGTAACAATA | CGCCAATAAAGTGGAGGATAAGAA |
| 1               | B10 | umc1880  | 1 | CGCATCCGCCTAGCTCTATACTAA | GCATCGAACAGCTGAGATTGTAGA |
| 1               | B11 | bnlg2295 | 1 | CGGAGGAGTGGTCTTGAAA      | GGTTAGTGAAAGGGTTGCCA     |
| 1               | B12 | umc1144  | 1 | ATGGCCCACTCATCATATCTCTGT | TGTGTTGATTAGCAGCGGATAAAA |

| Plate 1 - Row C |     |          |   |                            |                          |
|-----------------|-----|----------|---|----------------------------|--------------------------|
| 1               | C1  | umc1169  | 1 | TAGCCAACAGTCCAACATTTTTCA   | CAGGCTAGAATAACATCCCGAAGA |
| 1               | C2  | umc1243  | 1 | AACTGCAGAGTCGCCTGATCC      | AAGCAGACTATGCTATGCTACGCC |
| 1               | C3  | umc1917  | 1 | ACTTCCACTTCACCAGCCTTTTC    | GGAAAGAAGAGCCGCTTGGT     |
| 1               | C4  | umc1076  | 1 | TTGGAAATCACCAATTGATATAGTTG | TCTATTGCAAACGCCAAAAGTAGC |
| 1               | C5  | umc1124  | 1 | GAAAGGAATCTTTCAGCTCACACC   | ACCTGGCGAGCAGTAGCAGTAG   |
| 1               | C6  | umc1297  | 1 | TGGTCACTGACTGTTTCGACTAGC   | ATCGCCTCAACACACCTTCATATT |
| 1               | C7  | umc1395  | 1 | TGAATGAGTGGCATTCAAAATCTG   | CAGATTGCATGTGTGAGTGTGTGT |
| 1               | C8  | umc1493  | 1 | CAACATTTTCTCAAAACAGACACA   | CAGAAATTTTGCCTTGGAGTTGT  |
| 1               | C9  | bnlg1598 | 1 | GGCAAGATTCGGACCAGG         | CGGTTAGGAGCAGTACGTCA     |
| 1               | C10 | umc1035  | 1 | CTGGCATGATCACGCTATGTATG    | TAACATCAGCAGGTTTGCTCATTC |
| 1               | C11 | umc1335  | 1 | ATGGCATGCATGTGTTTGTTTAC    | ACAGACGTGCTAATTCCTGAAAG  |
| 1               | C12 | umc1396  | 1 | TTCGATTATCCATTGAGCCTCTG    | CTCCTAACGCAGGAGACAAGAGAG |

| Plate 1 - Row D |     |          |   |                           |                           |
|-----------------|-----|----------|---|---------------------------|---------------------------|
| 1               | D1  | umc1590  | 1 | CAGAGTCTGATAGTCCGAACCCAG  | GTAAGGCTCACAGCTTCCGACAG   |
| 1               | D2  | bnlg1025 | 1 | TGGTGAAGGGGAAGATGAAG      | CCGAGACGTGACTCCTAAGC      |
| 1               | D3  | umc1128  | 1 | TCAATTTTGAGCTATCACTTTCCG  | ATTGGTTCCATTGGTTTTGTTGAT  |
| 1               | D4  | umc1147  | 1 | GAGAAACCATCGACCTTCCTAAC   | TTCTATGGTACAGTTCTCCCTCG   |
| 1               | D5  | umc1278  | 1 | GTCGGAGGATGATCCCTATCTAT   | TGCCATAGTACATGTCCGTCATTC  |
| 1               | D6  | umc1358  | 1 | AGAACCTCCCGCTTGACGAC      | ACCTCAACCTCGACCTCTGCAT    |
| 1               | D7  | umc1706  | 1 | ATCGAGAGGGGTAAATAAGGACGA  | ACCAACCACGAGGCGATGTA      |
| 1               | D8  | umc1833  | 1 | TTACATGTACCCACATCCTTGACAG | CAGGGATCTGGGAGTATCCTCTTT  |
| 1               | D9  | mmc0041  | 1 | AGGACTTAGAGAGGAAACGAA     | TTTATCCTTACTTGCAGTTGC     |
| 1               | D10 | phi037   | 1 | CCCAGCTCCTGTTGTCGGCTCAGAC | TCCAGATCCGCCGCACCTCACGTCA |
| 1               | D11 | umc1383  | 1 | CACACACATCGATCATGAGCATAC  | GTGTACTACCATCAGACCATCCA   |
| 1               | D12 | umc1446  | 1 | GCGCTGCTGCTTCTTAAATTATCT  | GATGAGACCACCTACAAGTTCGCT  |

| Plate 1 - Row E |     |          |   |                            |                            |
|-----------------|-----|----------|---|----------------------------|----------------------------|
| 1               | E1  | bnlg1268 | 1 | TCCACGGTGACTGTAGAACG       | CACTTCCCCCAGATCATTTG       |
| 1               | E2  | umc1082  | 1 | CCGACCATGCATAAGGTCTAGG     | GCCTGCATAGAGAGGTGGTATGAT   |
| 1               | E3  | umc1184  | 1 | CTTCCTTACGTGTACCGCTCT      | GTGGAGTGATGTGATCGATGATG    |
| 1               | E4  | umc1306  | 1 | CGAAACAAAACACCCAGCAGTAGT   | CCAGGATGAATAAATCGTATTGCC   |
| 1               | E5  | umc1411  | 1 | CGATAATGAAGATGAGCTCCGTG    | CTAGCCGGTTGTTGTTGCCT       |
| 1               | E6  | umc1431  | 1 | GTTGCTGTCCCCGACGTAGTAG     | GTGAGAGTACCGAGATGGCTGAG    |
| 1               | E7  | bnlg1347 | 1 | GTGGTCACGACGAAATCCTT       | TTGCAATCACACAGGTGGTT       |
| 1               | E8  | bnlg1671 | 1 | TCACGATCAGCAAGCAATTC       | CCCCACCAACCTTAGAGTCA       |
| 1               | E9  | bnlg131  | 1 | CTCTGCGCTACCTTTCTGAGTC     | GCGGAATCCTTGTTCTTGG        |
| 1               | E10 | bnlg2123 | 1 | TGATGCAGACAAGTCCTTCG       | ACAAATCTCACCTCTGCGCT       |
| 1               | E11 | phi064   | 1 | CCGAATTGAAATAGCTGCGAGAACCT | ACAATGAACGGTGGTTATCAACACGC |
| 1               | E12 | umc1064  | 1 | GTGGGTTTTGTCTGTAGGGTGGTA   | TCCATCCACTCGACTTAAGAGTCC   |

| Plate 1 - Row F |     |           |   |                           |                          |
|-----------------|-----|-----------|---|---------------------------|--------------------------|
| 1               | F1  | umc1111   | 1 | CTACAGCCTTCTTTTTGGTGGAGA  | TGACTCTTAGCCGTTTCCATTTTC |
| 1               | F2  | umc1220   | 1 | ATCTTTTTCCTCCGAGCTGTACG   | GTGGACGAGTCCGTGCTCAG     |
| 1               | F3  | umc1331   | 1 | TTATGAACGTGGTCGTGACTATGG  | ATATCTGTCCCTCTCCCACCATC  |
| 1               | F4  | umc1538   | 1 | AGAAACAACACATTCCCTCGAAAC  | AGCAGCTTTTACCCTGATTTTTTC |
| 1               | F5  | umc1630   | 1 | CAGACCTTCGAGGGCAAGAACT    | AGTTTTGGCTTCTCTCCCAAGTC  |
| 1               | F6  | umc1862   | 1 | ATGGGCACATGAAAAAGAGACATT  | CCCATGAGAAGAGTGAAGACAACA |
| 1               | F7  | umc1605   | 1 | CCAGGAGAGAAATCAACAAAGCAT  | GGAGAAGCACGCCTTCGTATAG   |
| 1               | F8  | umc1725   | 1 | CTACGGCCAGAGTATCGGTAC     | TATGGTGGGAGAGACGACGGTAT  |
| 1               | F9  | umc1797   | 1 | TCAAGTGAATGCATAGCTTGCTC   | ACTGTTGGTAAACCTGTCATGACT |
| 1               | F10 | umc1622   | 2 | CGCTACAAATCCTACTGGTGCTTT  | CCTCGGATTTTCCAAACATTTCT  |
| 1               | F11 | phi402893 | 2 | GCCAAGCTCAGGGTCAAG        | CACGAGCGTTATTCGCTGT      |
| 1               | F12 | umc1419   | 2 | CTCATCACAACCTAGCGCCACTCTA | ATAGTGCAGAGGTATCGTGGC    |

| Plate 1 - Row G |     |          |   |                             |                            |
|-----------------|-----|----------|---|-----------------------------|----------------------------|
| 1               | G1  | umc1622  | 2 | CGCTACAAATCCTACTGGTGCTTT    | CCTCGGATTTTCCAAACATTTCT    |
| 1               | G2  | umc1165  | 2 | TATCTTCAGACCCAAACATCGTCC    | GTCGATTGATTTCCCGATGTTAA    |
| 1               | G3  | umc1227  | 2 | CAAGTTGGTGAGATGGATCTGTTG    | GCTCCTGGGTCTTCTCTCC        |
| 1               | G4  | umc1552  | 2 | CTCGATAGCTCTGCTGCTTCTCT     | CAACACCAGCCCTACCCAGA       |
| 1               | G5  | bnlg1297 | 2 | TCTCGATCGCTCCGATCTAT        | GACTCAACTCCAAAAGGCGA       |
| 1               | G6  | umc1261  | 2 | AGAAGTGCGTATGCTACAGTGGTG    | CCTAGTGGTGGAGTTCTAGGCAAA   |
| 1               | G7  | umc1265  | 2 | GCCTAGTCGCCTACCCTACCAAT     | TGTGTTCTTGATTGGGTGAGACAT   |
| 1               | G8  | umc1422  | 2 | GAGATAAGCTTCGCCCTGTACCTC    | CTCATCGCGATCTCCAGTC        |
| 1               | G9  | umc1542  | 2 | TAAAGCTATGATGGCACTTGACAGA   | CATATTTGCCCTTTGCCCTTTGTA   |
| 1               | G10 | umc1823  | 2 | AAAGCCTTACTGTTATTAGGCTAGGCA | AGAAAACCAGCCCCAGATGTTTC    |
| 1               | G11 | umc1934  | 2 | TCCGGGACTAGTTGCTTGGTAGTA    | TAGTGGTATCGTGATTCATGGGC    |
| 1               | G12 | umc1961  | 2 | GGATGAGAATTGAGAAAAGGCCAA    | CATGTCCATACACAGTCATACACTGC |

| Plate 1 - Row H |     |           |   |                          |                           |
|-----------------|-----|-----------|---|--------------------------|---------------------------|
| 1               | H1  | bnlg2248  | 2 | CCACCACATCCGTTACATCA     | ACTTTGACACCGGCGAATAC      |
| 1               | H2  | mmc0231   | 2 | GAGCGACTGCGAGACGG        | AGATCGCGCCACCGCTC         |
| 1               | H3  | phi109642 | 2 | CTCTCTTTCCTCCGACTTTCC    | GAGCGAGCGAGAGAGATCG       |
| 1               | H4  | umc1185   | 2 | AGTAAAAGAGGCAAGGACTACGGC | GCGGCGATATACGAGGTTGT      |
| 1               | H5  | umc1845   | 2 | TGGTTGAAGTGTAAATCTGTCTGA | TGGTAACCAGATTTCCACAGATG   |
| 1               | H6  | bnlg1018  | 2 | CGAGGTAGCACCGACAAAT      | CGAGTAAATGCTCTGTGCCA      |
| 1               | H7  | bnlg108   | 2 | GCACTCACGCGCACAGGTCA     | CGCCTGCCAAGGTACATCAC      |
| 1               | H8  | bnlg1175  | 2 | ACTTGACCGTCTCGCTTAT      | GCACTCCATCGCTATCTTCC      |
| 1               | H9  | bnlg121   | 2 | AGTTCTACAGGCTTCTGTCCAA   | CTATAAAGAAGGTAAGTGGTTGCTC |
| 1               | H10 | umc1026   | 2 | TCGTCGTCTCCAATCATACGTG   | GCTACACGATACCATGGCGTTT    |
| 1               | H11 | umc1259   | 2 | CTCTTGGTGGCAGAAGCAGAAT   | TAGCTAAACTTGAGTGCTCTGCC   |
| 1               | H12 | umc1465   | 2 | GTACTTCAAAGCACATGAATGCCA | AGTCTCGACTGCCAATTTACCAAA  |

| Plate 2 - Row A |     |          |   |                          |                           |
|-----------------|-----|----------|---|--------------------------|---------------------------|
| 2               | A1  | umc2007  | 2 | GTGCATATGCGCACGGAAGT     | AGTAGTTACACAACGCAACACGAGG |
| 2               | A2  | mmc0401  | 2 | CTCAGCTGCACTCCACA        | CCTTCCTTCTTCTCCAGC        |
| 2               | A3  | umc1884  | 2 | TAGGAGCAGTATGAGAGGGCACTT | CTTTTTCTAGCGATCATTTCTCCA  |
| 2               | A4  | bnlg1036 | 2 | GGGAGTATGGTAGGGAACCC     | AAACCCCTGGAGCATACCCCT     |
| 2               | A5  | bnlg1887 | 2 | CGAACCCTGTAGGCATGTG      | ATCATGCAGAGCAGATGCAG      |
| 2               | A6  | umc1004  | 2 | CTGGGCATACAAAGCTCACA     | TGCATAAACCGTTTCCACAA      |
| 2               | A7  | umc1080  | 2 | GAGGAGAAAAGGAGATGGAAGC   | AGATGCCGCGAGAAGATTCTAAACA |
| 2               | A8  | umc1875  | 2 | AAGCGACAGTTGGTTTCAGTTTC  | AGTTGCATGACCTTGTCAACCTTT  |
| 2               | A9  | umc1946  | 2 | GAAACGACCAGCACAGCACAT    | GCACCACACCATCAGATCCAG     |
| 2               | A10 | bnlg1045 | 2 | TCCCCGATAGCATATCGATC     | GTGACTTTGGGGAGTTTGGGA     |
| 2               | A11 | bnlg2077 | 2 | GACCAGAGGATGGGGAAATT     | GTAGGCACATGCACATGAGG      |
| 2               | A12 | mmc0191  | 2 | GGTGTTCAGTGTGAAAGGTTA    | AAGATTTCCGCAAGGTTAAAC     |

| Plate 2 - Row B |     |          |   |                           |                           |
|-----------------|-----|----------|---|---------------------------|---------------------------|
| 2               | B1  | mmc0271  | 2 | CGTAATGCGTAGCAACATAG      | CAACATCCTTTCCACCG         |
| 2               | B2  | umc1042  | 2 | AAGGCACTGCTACTCTATGGCTA   | CTGACCTTTGAATTCTGTGCTCCT  |
| 2               | B3  | umc1108  | 2 | TAAAGAGAGAGGAAACAAGCTGCG  | ATGATGAAGCCTCACACATACGAA  |
| 2               | B4  | umc1890  | 2 | TGAAGGGCCTCCAAGTTAATCTAAA | GCTAATGTGGAAGTGAAGAACGA   |
| 2               | B5  | bnlg1316 | 2 | CGAAACAGAGCCCAAAAGAC      | GATCCGCGTCTAGCCCT         |
| 2               | B6  | umc1126  | 2 | CAACAGGGTGAACCTCTGTACTT   | AATATGGTGTGTGATTTGCATCG   |
| 2               | B7  | umc1230  | 2 | GCGATTTCACATATTGTGGTAAAGG | GTACGACCGTTGAAACTGTTGTTTT |
| 2               | B8  | umc1604  | 2 | ACAGCCACCACCACTCCATC      | AGATCTTCGAGAGCGTGGAGAAC   |
| 2               | B9  | umc1704  | 2 | TTCACCGGGTAGTCTTCTTACTG   | AAGTACGCTGTACGCAGGCAG     |
| 2               | B10 | umc1798  | 2 | TATAACAACGTAGCAAAGCACGGG  | GATCGACCCCTAATCGTCTCTTAC  |
| 2               | B11 | bnlg1520 | 2 | TCCTCTTGCTCTCCATGTCC      | ACAGCTGCGTAGCTTCTTCC      |
| 2               | B12 | umc1252  | 2 | GCGTCGGAGAAGTACATCAAGTTT  | CTTCTGCATCATCATCATCGTCTT  |

| Plate 2 - Row C |     |           |   |                          |                           |
|-----------------|-----|-----------|---|--------------------------|---------------------------|
| 2               | C1  | umc1551   | 2 | CACCGGAACACCTTCTTACAGTTT | CGAAACCTTCTCGTGATGAGC     |
| 2               | C2  | umc1696   | 2 | CTAGGGTTTAACCAACGGGGAG   | TAAGGAGAGGGTTCGATGAACACAT |
| 2               | C3  | umc1780   | 3 | CTGTCCCCAGGTTGCTGTAGTAGT | CATGATGTACCCGCAACAAATG    |
| 2               | C4  | phi453121 | 3 | ACCTTGCTGTCTTCTTCTTCT    | CAAGCAAGACTTTTGATCAGCC    |
| 2               | C5  | umc1746   | 3 | ACACGAGCATCTACATCTCTCTA  | ACCTTGCTGTCTTCTTCTTCTT    |
| 2               | C6  | umc1793   | 3 | TGCACACCCTTTATGAATCATCA  | CGTATAAGCTTTTGGGGTCTCT    |
| 2               | C7  | umc1931   | 3 | TAGCCTGAGTCGTTACAATGTGCT | TAGGTCCACAAAATAAACAGGCAG  |
| 2               | C8  | phi104127 | 3 | CTTTGCTGCTGCTTCCTACG     | AACCAGTGACGTACACAAAGCA    |
| 2               | C9  | umc1394   | 3 | CCCAGATCAGAAAAACATTCACTT | CCTAACCTGAAGAAGGGAGGTCAT  |
| 2               | C10 | umc1970   | 3 | ACTGATGGTGTCTTGGGTGTTTT  | TTTTTACCCGAAGGTTCATCGTTT  |
| 2               | C11 | bnlg1144  | 3 | TACTCGTCGTGTGGCGTTAG     | AGCCGAGGCTATCTAACGGT      |
| 2               | C12 | bnlg1647  | 3 | CGTCGTCTGTGGACGTACTG     | AGAAGCTCACAAGCCTGCTC      |

| Plate 2 - Row D |     |           |   |                           |                           |
|-----------------|-----|-----------|---|---------------------------|---------------------------|
| 2               | D1  | phi193225 | 3 | GCTCTTGCGTGCTTCTT         | GCGGGGAGGTGAAGAGCTA       |
| 2               | D2  | phi374118 | 3 | TACCCGGACATGGTTGAGC       | TGAAGGGTGTCTTCCGAT        |
| 2               | D3  | umc1057   | 3 | GCCACGCTCAACTACGACAAC     | GAACCCCTCCAGTAGCTCAG      |
| 2               | D4  | umc1458   | 3 | CCAATAAAACAAATCATCTCCCCCT | TGCTATGCTATGTACAGGGACAGG  |
| 2               | D5  | umc1886   | 3 | GTTTGACAGCACAAGTGCAAGAAA  | GAGGTGGACATTGGACAACACC    |
| 2               | D6  | bnlg1325  | 3 | CTAAATGCGCAGCAGTAGCA      | TGCTCTGCAACAACCTTGAGG     |
| 2               | D7  | bnlg1447  | 3 | GAGAGGAGAGGCTGAGCTGA      | TCCTCCCACTGAATTTCAC       |
| 2               | D8  | bnlg1452  | 3 | CTCCTCTCTCCACGATCAC       | CGCAAACGATCTCTGACCTT      |
| 2               | D9  | mmc0132   | 3 | ATATTCATCGGTTCAACTTCC     | AGCGCCAGCCTCCCGTAGTC      |
| 2               | D10 | umc1030   | 3 | TCCAGAGAATGAGATGACAAGACG  | CAGAATAACAGGAGATGAGACGCA  |
| 2               | D11 | umc1087   | 3 | AATCGTTTACACGAGAAGCAAAGC  | ATTCTAACTGGTCGCGCTGTTT    |
| 2               | D12 | umc1223   | 3 | TTCAACAGATTCAGAGAAAGCACA  | TTGATAATTAATCCGCAGCTCTCTC |

| Plate 2 - Row E |     |          |   |                           |                           |
|-----------------|-----|----------|---|---------------------------|---------------------------|
| 2               | E1  | umc1425  | 3 | CTGTAATCGCTAACGGGTAACAT   | ATAGTCAAGCAGCCAACAAAATCC  |
| 2               | E2  | umc1449  | 3 | TCATCATGCTTTCTCAAGGTCAA   | AGTACTGCTCCGATGACGGG      |
| 2               | E3  | umc1717  | 3 | ACGACGAATTCATAACACAACGA   | TTATCAGAGGAAGGGTTACGTTGG  |
| 2               | E4  | umc1773  | 3 | GGATCACACTATCGAGTCAGCGAT  | CAAGGTAGCGTCGCTCCTC       |
| 2               | E5  | umc2000  | 3 | CTGTTGTCAAGCCAAGCCAGT     | AGGCTTGTGAGACTCAGCAGTTTT  |
| 2               | E6  | umc2002  | 3 | TGACCTCAACTCAGAATGCTGTTG  | CACAAAATCCTCGAGTTCTTGATTG |
| 2               | E7  | bnlg1505 | 3 | GAAAGACAAGGCGAAGTTGG      | GCTTCTGAAGTGGATCGGAG      |
| 2               | E8  | mmc0022  | 3 | AGGTGTTGTTTTGTTTCGCT      | TGCTTGTAAAGCTCATTATT      |
| 2               | E9  | phi053   | 3 | CTGCCTCTCAGATTCAGAGATTGAC | AACCCAACGTACTCCGGCAG      |
| 2               | E10 | umc1102  | 3 | AAAATTAAAGTCAAGAGCGGGGAG  | TCTAGCCGTAGCTTTAGCTGCATT  |
| 2               | E11 | umc1167  | 3 | CCTGCATGCATTAGGTATACGAAG  | GTTTCTCCAAGTTTTGGCTTGA    |
| 2               | E12 | umc1174  | 3 | GCTAGTAGCTCTAGTTGTCCGCGA  | GCTCAAGGTTGTTTTCTGCCAGT   |

| Plate 2 - Row F |     |           |   |                             |                          |
|-----------------|-----|-----------|---|-----------------------------|--------------------------|
| 2               | F1  | umc1307   | 3 | GTACGGGTGAAGAGAACAGGTCAA    | ATCTTCTCTGTTTTGGTCCCTCC  |
| 2               | F2  | umc1400   | 3 | TTACCAATTGTATCCATCACACCG    | ACAACATAGCAGCCATCCTACTCG |
| 2               | F3  | bnlg1798  | 3 | AAGTTGGTGGTGCCAAGAAG        | AAAAGGTCCACGTGAACAGG     |
| 2               | F4  | bnlg197   | 3 | GCGAGAAGAAAGCGAGCAGA        | CGCCAAGAAGAAACACATCACA   |
| 2               | F5  | phi102228 | 3 | ATTCCGACGCAATCAACA          | TTCATCTCCTCCAGGAGCCTT    |
| 2               | F6  | umc1027   | 3 | AACTCTGTCTCCGTCAACCGTGT     | GACCTCATCTCGGTGGAATTG    |
| 2               | F7  | umc1644   | 3 | CCATAAAGTTCCTTTGGCACAC      | CTTTCACGTGTTAAGGGAGACACC |
| 2               | F8  | umc1949   | 3 | TGTAAACAGGTTGATCGTTGGAGA    | TGTTTGTATCGCTTCACGCA     |
| 2               | F9  | umc1135   | 3 | TTTTTAACCTCACGAGCATCGTCT    | CGCTAGCTTAGCTCCATCGTTTTA |
| 2               | F10 | umc1148   | 3 | AAAATTACAGAGCATTTTGAAGAAGAA | TAGCCGTGTGAGTTGTAGATCCT  |
| 2               | F11 | umc1399   | 3 | GCTCTATGTTATCTTCAATCGGGC    | GGTCGGTCCGTACTCTGCTCTA   |
| 2               | F12 | umc1489   | 3 | TTAATAGCTACCGCAACCAAGAA     | CTGAGCCACAGTACCTTGCTGTT  |

| Plate 2 - Row G |     |          |   |                          |                          |
|-----------------|-----|----------|---|--------------------------|--------------------------|
| 2               | G1  | umc1528  | 3 | AGTTCAACTGCTTAAGATCCGGTG | GTCTGTGCTGTGTGCCAGTG     |
| 2               | G2  | bnlg1108 | 3 | GGATTCCTTTATGACGGGGT     | AGTAACAACCAAGGCATCGG     |
| 2               | G3  | umc1140  | 3 | CGAGCAAAGAGAGGGAGAGAGA   | GCCTCTACCACCTCGTCCATC    |
| 2               | G4  | umc1273  | 3 | GTTGCTGCTGCTTCTTATATGCT  | AATTGGCGCAGGCTATAGACATTT |
| 2               | G5  | umc1844  | 3 | GGCATGGGTCTCTATAAAGTCAT  | CGACGTATATGGCTGAGAACCCTA |
| 2               | G6  | bnlg1182 | 3 | AGCCGAGTCAGTTTCGAGGTA    | CAGGGGCTTGAGGTGAGTTA     |
| 2               | G7  | bnlg1496 | 3 | CTGGGCAGACAGCAACAGTA     | AGCCAAAGACATGATGGTCC     |
| 2               | G8  | bnlg1754 | 3 | CCATCGCTGTACACATGAGG     | TACCCGAAGGATCTGTTTGC     |
| 2               | G9  | umc1361  | 3 | GTGCTTCTTCTGCGTACTCC     | AAGAGCTACTTCAACAAGTCCGCC |
| 2               | G10 | umc1594  | 3 | GCCAGGGGAGAAATAAAATAAAGC | CACTGCAGGCCACACATACATA   |
| 2               | G11 | umc2008  | 3 | GTGGACTACTCTCGCTTCGCTTT  | CGTGGACGTACTCGATTAGTTTGT |
| 2               | G12 | umc1136  | 3 | CTCTCGTCTCATCACCTTTCCCT  | CTGCATACAGACATCCAACCAAG  |

| Plate 2 - Row H |     |          |   |                              |                           |
|-----------------|-----|----------|---|------------------------------|---------------------------|
| 2               | H1  | umc 1008 | 4 | TCTAGCTTGTGGTGGTGGTTGA       | ACATGAGCACAAAGACTGACGC    |
| 2               | H2  | phi072   | 4 | ACCGTGCATGATTAATTTCTCCAGCCTT | GACAGCGCGCAATGGATTGAAC    |
| 2               | H3  | umc1008  | 4 | TCTAGCTTGTGGTGGTGGTTGA       | ACATGAGCACAAAGACTGACGC    |
| 2               | H4  | umc1232  | 4 | GGAATTACCACAACAACTAACTTGG    | AGGCTCTAGCTACCTGGCTACGTT  |
| 2               | H5  | umc1561  | 4 | TCTCTTATCTCAGCATCTCTCCA      | TATTGTGATGTGAGCTGCATTGG   |
| 2               | H6  | bnlg1318 | 4 | TTATGTGTGAGAACGACTCG         | AGCATGGCAGAGAAGGTGAT      |
| 2               | H7  | umc1164  | 4 | AAATAAACGCTCCAAAGAAAGCAA     | GCACGTGTGTGTGTTGTTTTTA    |
| 2               | H8  | umc1228  | 4 | TCCTCAAGGACCTGCTCCAC         | ACCTATACAGACGGAGACGGGG    |
| 2               | H9  | umc1276  | 4 | ACGCAATTATTACTGCCACACGTC     | CTACCTTGTTCCTAGGGCCGTCTA  |
| 2               | H10 | umc1288  | 4 | ATCCGGACAAAATGAACTTTCATC     | ATAGATTCAAGTGTGGACCGAGGA  |
| 2               | H11 | umc1294  | 4 | GCCGTCACAGGGCTTAACT          | GCCTCCAGCTCTCTCGTCTCTT    |
| 2               | H12 | umc1509  | 4 | CTTCTGTCAGATTACCGTTTCTT      | TTGGTTCTTTTGACCATAGACAAGC |

| Plate 3 - Row A |     |          |   |                              |                            |
|-----------------|-----|----------|---|------------------------------|----------------------------|
| 3               | A1  | nc004    | 4 | TGCGAAGAAGCAGTAGCAAA         | TGGAGGTAGAAGACGCACG        |
| 3               | A2  | phi021   | 4 | TTCCATTCTCGTGTCTTGGAGTGGTCCA | CTTGATCACCTTTCTGCTGTGCGCCA |
| 3               | A3  | umc1550  | 4 | CGGGGTAATTGGGTACATAACCTC     | GTGCCTCCAACGCCTAGTTTTT     |
| 3               | A4  | umc1926  | 4 | ATGCCAGCATTCTCATCTACAT       | TGAGGCTTGGTCCACTAAAGAAAAG  |
| 3               | A5  | mmc0471  | 4 | TTAGCACATTTGAAGAGTTTTG       | TTTCCTTACGTTTCTCTGT        |
| 3               | A6  | phi096   | 4 | TCCACCATTTGACACTTAGGCA       | GCGTAGGACGACCGTTGAA        |
| 3               | A7  | umc1117  | 4 | AATTCTAGTCCTGGGTGCGAACTC     | CGTGCCCGTGGAGTCTACTACT     |
| 3               | A8  | umc1652  | 4 | GAGAGCAGTAGCACTGACCTTTTC     | CACTCGACCTCGATCGGAAC       |
| 3               | A9  | umc1963  | 4 | CTCGTTCGAGGGGATGTACAAG       | CTTGCACTGGCACAGAGACG       |
| 3               | A10 | bnlg1937 | 4 | AATGCTCGGTCCACAGAATC         | AACTGGAGCCAAAAGTGGTG       |
| 3               | A11 | phi026   | 4 | TAATTCTCGCTCCCGGATTACGC      | GTGCATGAGGGAGCAGCAGGTAGTG  |
| 3               | A12 | umc1081  | 4 | TTGGGTTACATCCTCCTAGGAACA     | ACGTGGACAACCAGTCTATCAACA   |

| Plate 3 - Row B |     |          |   |                          |                           |
|-----------------|-----|----------|---|--------------------------|---------------------------|
| 3               | B1  | umc1088  | 4 | TCATCCTCCTAGCTCCTCTACTCG | AAAACAGTCAGCAGAACCCACTTT  |
| 3               | B2  | umc1969  | 4 | CTCGAGCCCAGCAGAGAAAAG    | GGTGGAGCCCATGGCTATTACTAT  |
| 3               | B3  | bnlg1137 | 4 | ATGAGCTCAGTCACACTGTAGTG  | ACTGATGACTGGTCCATGCA      |
| 3               | B4  | bnlg2291 | 4 | CCTCTCGATGTTCTGAAGCC     | GTCAATACTTGCCTCCCAA       |
| 3               | B5  | umc1651  | 4 | GATGGTGGTTATGAATGCATGTGT | AGACGACGAAATTAACAGCCATA   |
| 3               | B6  | bnlg1444 | 4 | GCATGGATGGAGAAAAGAGGA    | AGACGACGAAGCTTTTGCAT      |
| 3               | B7  | bnlg2162 | 4 | GTCTGCTGCTAGTGGTGGTG     | CACCGGCATTGATATCTTT       |
| 3               | B8  | umc1086  | 4 | CATGAAAGTTTCTGTGCAGATT   | GGGCAACTTTAGAGGTGCAATTTAT |
| 3               | B9  | umc1132  | 4 | CCAGTCTCTATTACGTTCCGAAT  | GGAGAGGGACAGAGATAGGGAGAG  |
| 3               | B10 | umc1418  | 4 | TCACACACACACTACACTCGCAAT | GAGCCAAGAGCCAGAGCAAAG     |
| 3               | B11 | umc1775  | 4 | GAGGACAACGCTGCTATTCTCG   | GGAACCTCCGTCAAAATCCCATC   |
| 3               | B12 | umc1808  | 4 | ATACACAGTGACAATGCGCCAC   | AGCGAGTCATCAACATCATCAGG   |

| Plate 3 - Row C |     |         |   |                              |                             |
|-----------------|-----|---------|---|------------------------------|-----------------------------|
| 3               | C1  | umc1834 | 4 | AAGATAATGCAACCTGGACAAAA      | TTGCGGATCTGTTAAGGTGACATA    |
| 3               | C2  | umc1842 | 4 | CCACCTGCACAACACACATAAAAC     | GTGGTGGAGTCGCTAAGTCAGGT     |
| 3               | C3  | umc1856 | 4 | CATGCCTTTATTCTCACACAAACG     | AGATCTGTTTTGCTTTGCTCTGCT    |
| 3               | C4  | umc1871 | 4 | CATGCAAGCTTATCCTCCTCACTT     | CTCTTTTCTGCTGCTAGAGATG      |
| 3               | C5  | umc2009 | 4 | CACITCAAGGCTGTGTCTATTGTG     | CCTCTCCGGATCAGAACAAAGAAG    |
| 3               | C6  | umc1101 | 4 | GCTGAAAAACGGAGTTCATATGGT     | AAGCTTATCCACCTCGAGGAAAAAC   |
| 3               | C7  | umc1573 | 4 | GTCCCTCCTCTGCACACAC          | ACGACGTCGGTACTTGTCTGG       |
| 3               | C8  | umc1650 | 4 | TCGTGAACTACTACATGGTGAGCA     | AAAGTTCGTTCTCCATGGTACTG     |
| 3               | C9  | umc1803 | 4 | TGACCTCTCCCTTAGGCCTCTAC      | CCCAATCTTCAGGTAATCTCTCTC    |
| 3               | C10 | bnlg589 | 4 | GGGTGTTTTAGGGAGGCACCTTTGGT   | GCGACAGACAGACAGACAAGCGCATGT |
| 3               | C11 | umc1109 | 4 | GCAACACAGGACCAATCATCTCT      | GTTTCGGTCCGTAGAAAGAACTCTCA  |
| 3               | C12 | umc1532 | 4 | ATCTAGAAAAATTATAATGGCATGGATT | CTCTCGGTTTTGGACTCTGCT       |

| Plate 3 - Row D |     |          |   |                           |                           |
|-----------------|-----|----------|---|---------------------------|---------------------------|
| 3               | D1  | umc1610  | 4 | CTTGAGATCTGTGGCGTCGTC     | CGTCTCCTCCATCTCTACTCGTTC  |
| 3               | D2  | umc1720  | 4 | TATTGCCGATTAATCTGTCCCAT   | CAAGTTTGGGTACCTGAAGATTCCG |
| 3               | D3  | umc2011  | 4 | ACATGTGCTGCAGTCATTAGGAAA  | AAATCACATGGTTTTTCAGGTGCT  |
| 3               | D4  | bnlg1337 | 4 | TCTAGAGACGGGAAAAACAAG     | AAAGCCGGTGGATAAGAAAA      |
| 3               | D5  | umc1058  | 4 | AGCAAGCAGTTTCAAAACAAGGAT  | GACACCAGCACCATTGAACG      |
| 3               | D6  | umc1707  | 4 | GTCGAGAAGCGATCCATCATAGTAG | GCACGACAGGAGTACGGTC       |
| 3               | D7  | umc 2291 | 5 | CTCGACGAGTTCAAGCGCTAC     | AACCTCTCCTGGCGAGCATCT     |
| 3               | D8  | bnlg1006 | 5 | GACCAGCGTGTGATCCC         | GGAGACCCCGACTCTCTCTC      |
| 3               | D9  | mmc0151  | 5 | AAACCATGCATCCAACRAATG     | AGACCCAGAGATGATTTAGG      |
| 3               | D10 | umc1308  | 5 | GCAGATGGACACAAACAAATGAAG  | GCTACTGATGCTGGCAATCTTACA  |
| 3               | D11 | umc1496  | 5 | GATTACAACCCACCGGAGTTACAG  | GCTCTTCTAGGTGCAGACAAAGA   |
| 3               | D12 | umc1679  | 5 | CACTGCTAAGCTGCTCCTGTT     | TGCTAACTAACCTGACCCTCTCA   |

| Plate 3 - Row E |     |           |   |                          |                          |
|-----------------|-----|-----------|---|--------------------------|--------------------------|
| 3               | E1  | umc1478   | 5 | GAAGCTTCTCTCTCGCTCTC     | CAGTCCCAGACCCTAGCTCAGTC  |
| 3               | E2  | umc1781   | 5 | CAAAAGGTGCAACTGTAATTGCCT | ATGAGGCGAAGCCAAGAAAAAGT  |
| 3               | E3  | bnlg105   | 5 | GACCGCCCGGGACTGTAAGT     | AGGAAAGAAGGTGACGCGCTTTTC |
| 3               | E4  | bnlg565   | 5 | TAAGAACGACGAACGGTAACTG   | GCTCACTGCACGCCAACAC      |
| 3               | E5  | dupssr01  | 5 | TGTTCTCAACAACCACCG       | CGTTTAGCGATATCATTTTCC    |
| 3               | E6  | umc1587   | 5 | ATGCGTCTTTTCAAAAGCATTACA | AGGTGCAGTTCATAGACTTCCTGG |
| 3               | E7  | umc1761   | 5 | GGCTTGTAAGTGGAGTGGTCGTAG | AGCAGCTTCAGAGGAGGAAGAAG  |
| 3               | E8  | bnlg1046  | 5 | TGAGCCGAAGCTAACCTCTC     | GATGCAAAGGAGGTTCAGGA     |
| 3               | E9  | bnlg1879  | 5 | TGCTCTCACAAGATGGTGGA     | CCACAGGATAAAATCGGCTG     |
| 3               | E10 | phi109188 | 5 | AAGCTCAGAAGCCGGAGC       | GGTCATCAAGCTCTCTGATCG    |
| 3               | E11 | umc1056   | 5 | CGGATCGCTTTTACCGTCTATAA  | AGCAAGAGTAGCGTTCCATTTCAG |
| 3               | E12 | umc1274   | 5 | TTGAGTCTGGTACTGCGTATGAGG | TAGCACTCCAACAGCAAGAGTTTG |

| Plate 3 - Row F |     |           |   |                          |                           |
|-----------------|-----|-----------|---|--------------------------|---------------------------|
| 3               | F1  | umc1447   | 5 | TAATACTCTACTAACGGCGCTGC  | TCTGTCTCCCATGCCTGAAATAAT  |
| 3               | F2  | umc1692   | 5 | AGAGACGAACTGAAGCCTGAAGTG | GATGTCCACGTCCTGGTAGAAGTT  |
| 3               | F3  | umc1705   | 5 | ATCTCAGTACGGTAATGCAGACA  | CATGACCTGATAAACCCCTCCTCTC |
| 3               | F4  | umc1935   | 5 | TGTGCTGTGTGTAATATGGTCGTG | TAATCAGGAGGAGAAATTCGGTCAA |
| 3               | F5  | bnlg1208  | 5 | GCTGTGATGGTGAGACGAGA     | GCAGGCACTACTAAACCCGC      |
| 3               | F6  | dupssr10  | 5 | AGAAAATGGTGAGGCAGG       | TATGAAATCTGCATCTAGAAATTG  |
| 3               | F7  | phi330507 | 5 | GTAAGTACGATGCGCCTCCC     | CGGGGTAGAGGAGAGTTGTG      |
| 3               | F8  | umc1060   | 5 | ACAGGATTTGAGCTTCTGGACATT | GGCCTCTCCTTCATCTATTCAA    |
| 3               | F9  | umc1192   | 5 | GATCGAACTGCAGAGGAACAAGAG | CGCTCCACATCCACATCTACAC    |
| 3               | F10 | umc1221   | 5 | GCAACAGCAACTGGCAACAG     | AAACAGGCACAAAGCATGGATAG   |
| 3               | F11 | umc1224   | 5 | CTGAGAGGTCCCAAAGGAGTACAA | ATGACCTGCACACAGAAAGAACAA  |
| 3               | F12 | umc1591   | 5 | CAACCAACTGGCACTACTCGAC   | GAGGTCTCTCTCGGTCGACATC    |

| Plate 3 - Row G |     |         |   |                          |                           |
|-----------------|-----|---------|---|--------------------------|---------------------------|
| 3               | G1  | umc1990 | 5 | CATTTTCTGTGCTCAAATGGCTTC | CAGGCTGGACATTGCTCTCTAGTT  |
| 3               | G2  | mmc0081 | 5 | TGAAATAATTCAGCACTCC      | TGATAGCACACACAGCTATG      |
| 3               | G3  | mmc0282 | 5 | CTCTTTCTTTATTTGTTCCGTT   | GGACTACACATCACCAGCA       |
| 3               | G4  | umc1155 | 5 | TCTTTTATTGTGCCCGTTGAGATT | CCTGAGGGTGATTGTCTGTCTCT   |
| 3               | G5  | umc1482 | 5 | GAACAAAGAATCACAAACAGATGC | CAGGTTCTGAGGAAAGCAAGGTT   |
| 3               | G6  | umc1822 | 5 | GGTATAATTTTGAAGCAGAAAGGG | GGTTTGCTCAGGAAGAGCATGT    |
| 3               | G7  | bnlg609 | 5 | GCTCGTTCTCGCCAGTGTGCCG   | GGCCCGAGCCATCTCTGCTGC     |
| 3               | G8  | umc1019 | 5 | CCAGCCATGTCTTCTCGTTCTT   | AAACAAAGCACCATCAATTCGG    |
| 3               | G9  | umc1524 | 5 | TACAAGTAAACACGCGCAGGAGTA | TGTTTGAGCGACTTACTTGACCTG  |
| 3               | G10 | umc1941 | 5 | ACGACGAGACTGTGTTCTGGTTCT | AGGAGGATTACGTCAATCTGTTCTG |
| 3               | G11 | bnlg118 | 5 | CTTCCAGCCGCAACCCTC       | CCAACAACGCGGACGTGA        |
| 3               | G12 | umc1072 | 5 | GAGGAGACCGCCTCTGGTTC     | CTTCGGGTTCTGACCTTCT       |

| Plate 3 - Row H |     |          |   |                          |                          |
|-----------------|-----|----------|---|--------------------------|--------------------------|
| 3               | H1  | umc1375  | 5 | AGTTCGACTTCGACCCGGAC     | GTCAGGCTTCTTCTCGACACACC  |
| 3               | H2  | umc1646  | 5 | GCAATTATGAACAGTTGCGTGTGT | AGTGGATCGATCGAATGACTTT   |
| 3               | H3  | umc1829  | 5 | GTTGATTGGTTGATGTGGAACAA  | CAGTTTGATGTTTATGGCTCTCTC |
| 3               | H4  | umc1225  | 5 | CTAGCTCCGTGTGAGTGAGTGAGT | TTCTTCTTTCTTCTGTCGAAC    |
| 3               | H5  | umc1792  | 5 | CATGGGACAGCAAGAGACACAG   | ACCTTCATCACCTGCAACTACGAC |
| 3               | H6  | umc1153  | 5 | CAGCATCTATAGCTTGCTTGCAAT | TGGGTTTTGTTTGTGTTGTTG    |
| 3               | H7  | umc 1002 | 6 | AGCTAGCTATACACCGCCAGG    | TCAGTTTGAACAGGGAAAAGTA   |
| 3               | H8  | bnlg1043 | 6 | TTTGCTCTAAGGTCCCCATG     | CATACCCACATCCCGGATAA     |
| 3               | H9  | umc1143  | 6 | GACACTAGCAATGTTCAAAACCCC | CGTGGTGGGATGCTATCCTTT    |
| 3               | H10 | umc1753  | 6 | AAGATCTTGCTCCGTTTCCTCTCT | TTCAGATGCAAACTCTTTTCGCT  |
| 3               | H11 | umc1883  | 6 | GAATAATCAATCCATCGATCTCGC | AACTGCTGTGGATGAAAGAGGAAG |
| 3               | H12 | umc2010  | 6 | AATCTGGCAAAACCCCATAGAC   | GTCCTATCCACGGGTTCTGCTCTC |

| Plate 4 - Row A |     |          |   |                          |                          |
|-----------------|-----|----------|---|--------------------------|--------------------------|
| 4               | A1  | bnlg1371 | 6 | TTGCCGATAAGAACCAACA      | ACGACCGGTGTGGTTACATT     |
| 4               | A2  | bnlg1422 | 6 | GACGATTAACAGGTGGGGAC     | ATGATGCAAATGAGGCACAA     |
| 4               | A3  | bnlg1641 | 6 | ATCGTAACTCGATGGTTCGC     | TACGCTATTCAAAGCGGTCC     |
| 4               | A4  | bnlg1867 | 6 | CCACCACCATCGTAGGAGTT     | CAGTACACAGCAGGCAGCTC     |
| 4               | A5  | umc1133  | 6 | ATTCGATCTAGGGTTTGGGTCAG  | GATGCAGTAGCATGCTGGATGTAG |
| 4               | A6  | bnlg2191 | 6 | CACACAATCCCCACAAAAA      | CGAAACATCCAGGAACTGC      |
| 4               | A7  | umc1083  | 6 | CTTCTCTCTGGAGCGTGTATTG   | ATATGTTGCAGAACCTCCAGGTC  |
| 4               | A8  | umc1178  | 6 | CTGTCGTAAGAGCGCCAACAG    | GTCTGAACGATGAACAGTACACGC |
| 4               | A9  | umc1572  | 6 | CAAGGTGTCCTTGGTGTGTATCAG | AATCCTTCTCTGCGTCTTTCTCT  |
| 4               | A10 | umc1628  | 6 | GGCTGTAATGCAGGAGATTGAGTT | ACTCACGTCACAACTACCGTACCA |
| 4               | A11 | umc1887  | 6 | CTTGCCATTTTAATTGGACGTTT  | CGAAGTGGCCAAATAGCTACAGT  |
| 4               | A12 | mmc0523  | 6 | CCCTCTCTCACCCCTT         | AGACCCTGCTGCTAGCTAG      |

| Plate 4 - Row B |     |           |   |                          |                              |
|-----------------|-----|-----------|---|--------------------------|------------------------------|
| 4               | B1  | phi452693 | 6 | CAAGTGCTCCGAGATCTTCCA    | CGCGAACATATTGAGAAAGTTTG      |
| 4               | B2  | umc1014   | 6 | GAAAGTCGATCGAGAGACCCTG   | CCCTCTCTTCACCCCTTCTT         |
| 4               | B3  | umc1857   | 6 | TTCTTGCCAACAAATACAAGGAT  | GTTTATTGCTTCATCTTGGAACTT     |
| 4               | B4  | umc2006   | 6 | AGTCCATCACCATCCCTGGC     | GCAGAACTATTGTCAGTTAACCTTGCAT |
| 4               | B5  | bnlg1154  | 6 | GGGTGATCACATGGGTTAGG     | AAATCAATGCTCCAAATCGC         |
| 4               | B6  | bnlg1702  | 6 | TTATCATCAATGGAGGACACG    | AAAGACACACGCTAATGGGC         |
| 4               | B7  | umc1341   | 6 | GTCTACCAGGACGTTTACCTGTGG | CCTCAATCCTTTGTGGACAAACAC     |
| 4               | B8  | umc1352   | 6 | GTGACGAGATGGTGCAGAAAGAT  | CCTGGAGGTGGAAGGAGAGG         |
| 4               | B9  | umc1413   | 6 | CATACACCAAGAGTGCAGCAAGAG | GGAGGTCTGGAATTCTCTCTGTT      |
| 4               | B10 | umc1805   | 6 | AGTGACACGCTTTTAATCACCTC  | TGTGACCTGTGTGGTCTGTGG        |
| 4               | B11 | bnlg345   | 6 | CGAAGCTAGATGTAGAAAATCTCT | CTTACCAACCAACTCCCAT          |
| 4               | B12 | umc1424   | 6 | CCGGTCGAGGGGTAGTAGTAG    | ATGGTCAGGGGCTACGAGGAG        |

| Plate 4 - Row C |     |          |   |                          |                              |
|-----------------|-----|----------|---|--------------------------|------------------------------|
| 4               | C1  | umc1859  | 6 | ATATACATGTGAGCTGGTTGCCCT | GCATGCTATTACCAATCTCCAGGT     |
| 4               | C2  | bnlg1136 | 6 | TAACCGGATGAGCATCTTCC     | CATCAGCTTCAACGAGTTCTG        |
| 4               | C3  | bnlg1740 | 6 | TTTTCTCCTTGAGTTCTCG      | ACAGGCAGAGCTCTCACACA         |
| 4               | C4  | umc1063  | 6 | AGGCCACTGAGCAGGTGAAG     | GTGATGGTAGAGGAGTCTTGGTG      |
| 4               | C5  | umc1127  | 6 | GGTCCAGTGACATCTCAAAATGAA | ATATTCCCCTCCCTAATTTTCT       |
| 4               | C6  | umc1248  | 6 | CTTTGTCCATCGGCTTTATCTTT  | CACATTAAGTTACAAATACAAATCACCG |
| 4               | C7  | umc1653  | 6 | GAGACATGGCAGACTCACTGACA  | GCCGCCACGTACATCTATC          |
| 4               | C8  | mmc0171  | 7 | AATCCTACTTGCTGCCAAAGC    | CTTTGAGCTTTTGTGTGGAC         |
| 4               | C9  | umc 2177 | 7 | ACCATGCATGTCTACGCTACT    | GGGTACGTGCTGTGGAGGAC         |
| 4               | C10 | umc1241  | 7 | TGAAGCAAGTCACTGGTAAGAGCA | TGACACACCCATACTTCAACAAG      |
| 4               | C11 | umc1378  | 7 | GAAGTCGCTGATGAGAACGTAACC | GCTAGCTAGTGTGAGTTCTTCCGC     |
| 4               | C12 | umc1426  | 7 | TAGGGTCGATTCTGGATTGTCTG  | TGTAAACAGAAAGCATGCGAGTC      |

| Plate 4 - Row D |     |          |   |                          |                           |
|-----------------|-----|----------|---|--------------------------|---------------------------|
| 4               | D1  | umc1545  | 7 | GAAAACGATCAACAACAAGCTG   | ATTGGTTGGTCTTGCTTCCATTA   |
| 4               | D2  | umc1695  | 7 | CAGGTAATAACGACGCAGCAGAA  | GTCTAGGTTACATGCGTTGCTCT   |
| 4               | D3  | umc1840  | 7 | CTGTTGCATGCATTATAGACAGGG | GGAGAGAGCAGAGCACAAGAAAAAC |
| 4               | D4  | umc1066  | 7 | ATGGAGCACGTCATCTCAATGG   | AGCAGCAGCAACGCTATGACACT   |
| 4               | D5  | umc1159  | 7 | TTCCCATGTTCAATTCAGGTTCTT | TCATGGGTTTTGAGGCTGATTTT   |
| 4               | D6  | umc1577  | 7 | TTCCCTTCTTGGCAGGAGC      | AAGAACTCCTTCAAGCTGCCG     |
| 4               | D7  | bnlg1022 | 7 | GTGTTGTGCATCCACTCCCT     | GCAAAGATCTGTGAGGGGAC      |
| 4               | D8  | bnlg1247 | 7 | GAGCCAACGAAAGGGGTG       | CCGCAGTCGAACCTCTC         |
| 4               | D9  | bnlg1792 | 7 | CGGGAATGAATAAGCCAAGA     | GCGCTCCTTCACTTCTTTA       |
| 4               | D10 | bnlg2203 | 7 | CTCCGGCGAGCCAGAC         | CTCGACCATGCTCTCTCT        |
| 4               | D11 | phi034   | 7 | TAGCGACAGGATGGCCTCTTCT   | GGGGAGCACGCTTCTGTTCT      |
| 4               | D12 | umc1016  | 7 | GTGATACGGGTAATCTGGTGC    | GATGATGGGTGATCATCGGTTT    |

| Plate 4 - Row E |     |          |   |                           |                          |
|-----------------|-----|----------|---|---------------------------|--------------------------|
| 4               | E1  | umc1339  | 7 | GCACGGTTTTGTGAATATGTGTG   | GGTGGGAAGATATGCAACTGTCTC |
| 4               | E2  | umc1393  | 7 | CCTCTTCTTATTGTCAACGAACG   | GCCGATGAGATCTTTAACAACCTG |
| 4               | E3  | umc1401  | 7 | CTCTGGTCCATCCTCATCGACT    | TCTCTTGATCACATATCGATCCCA |
| 4               | E4  | umc1983  | 7 | ATGGATCAGGGGAAAGAGCAAG    | CTGAAGGCCTCCTCGTCCTC     |
| 4               | E5  | bnlg1805 | 7 | GCCCGTTTGCTAAGAGAATG      | TGTTGAGCATTTGCTCTTG      |
| 4               | E6  | mmc0411  | 7 | CGATGCAAGAGTGTCAAGTA      | ACTCCCTAGTGCAAAAATCA     |
| 4               | E7  | umc1001  | 7 | GCTACCCGCGGACATATAAT      | CCATGGGTAAAAACCCTACAGTG  |
| 4               | E8  | umc1015  | 7 | CAGACACAAGCAGCAAAGCAAG    | TCCGACTCCAAGAAGAGGAGAA   |
| 4               | E9  | umc1134  | 7 | AAAACCTAACAGGCAGCAGACCAAC | ATCAGCAAGTGACTGAATTCCTCC |
| 4               | E10 | umc1324  | 7 | ATCCATCATCATCATATTGCTTG   | ATGTCATCATGTACCAGGTGTTGG |
| 4               | E11 | umc1593  | 7 | CATGTTGATCATATGCACGAGAGA  | CAGCCTGGTGACTCATGGTTAAT  |
| 4               | E12 | umc1841  | 7 | CTGCATGATTCTCTGAACACG     | ATGATGCACCCGCGAGCTACTAC  |

| Plate 4 - Row F |     |           |   |                          |                           |
|-----------------|-----|-----------|---|--------------------------|---------------------------|
| 4               | F1  | umc1936   | 7 | GAGCTCATGTGTATGTGGACGTTG | AATAAACAGAGGTAGGTGAGGTGCG |
| 4               | F2  | bnlg1666  | 7 | GCTGGTAGCTTTCAGATGGC     | TGTCCCTCCTCCAGTTTCAC      |
| 4               | F3  | phi328175 | 7 | GGGAAGTGCTCCTTGCGAG      | CGGTAGGTGAACGCGGTA        |
| 4               | F4  | umc1029   | 7 | AACACCTGCTGGATATGGATCACT | GGAAGAAAAATGTCGACCTGCTC   |
| 4               | F5  | umc1125   | 7 | CGTCCGACATCTTGCTTTCTATC  | TTTACTTCTCAGCGGTAGATCGG   |
| 4               | F6  | umc1295   | 7 | GTCGATCTTCTCCCCATCA      | CGTTTCTATCTATGGAGGAGTGCG  |
| 4               | F7  | umc1342   | 7 | TCTAATCCAATCGACATCGACAGA | TCGCCCTCTTTCTTTTCTTTCT    |
| 4               | F8  | umc1708   | 7 | GATATGTCGAGCTTCGCTGGAG   | CGCACACTAAAGCATCCTTAACCT  |
| 4               | F9  | umc1799   | 7 | GTGATGAATAATGTCCCAATTCC  | GGACAGATGTCTGGAGATTGCTTT  |
| 4               | F10 | umc1944   | 7 | GAAGAAGGATCGCACACATGG    | AGACTGTGCGCTGTACTATACCC   |
| 4               | F11 | phi069    | 7 | AGACACCGCCGTGGTCGTC      | AGTCCGGCTCCACCTCCTTC      |
| 4               | F12 | umc1154   | 7 | CCACCACAAGACAAGACAAGAATG | CCTGATCGATCTCATCGTCGT     |

| Plate 4 - Row G |     |          |   |                          |                           |
|-----------------|-----|----------|---|--------------------------|---------------------------|
| 4               | G1  | umc1407  | 7 | AGGCTTACCTCCTGAGAAGCAGTT | AGGCTTAGCATCGGTGGAGAG     |
| 4               | G2  | umc1671  | 7 | AGCGGAGGAGAGGGAGGTTAT    | AAGTCCAGGTACCTCAGCTTCG    |
| 4               | G3  | umc1760  | 7 | CATGTGGGTGTTAATAAGCAAGGG | GCCTTGTTTGCTCTCTGAAACAAT  |
| 4               | G4  | phi116   | 7 | GCATACGGCCATGGATGGGA     | TCCCTGCCGGGACTCCTG        |
| 4               | G5  | umc1786  | 8 | ACCGTGACTTCTCCTCATAACTG  | CATTTTTGCGATTAGGAAATCCA   |
| 4               | G6  | umc1359  | 8 | GCAGAGCCAGAATTCGACCTT    | CATCGTCATATTTCGAGCAGAG    |
| 4               | G7  | umc1327  | 8 | AGGGTTTTGCTCTTGAATCTCTC  | GAGGAAGGAGGAGGTGATCGT     |
| 4               | G8  | umc1414  | 8 | CGATCATCTCTACTCTCTCGTCA  | GTTGACGACGTCTGGCTCCT      |
| 4               | G9  | bnlg1194 | 8 | GCGTTATTAAGGCAAGCTGC     | ACGTGAAGCAGAGGATCCAT      |
| 4               | G10 | bnlg2235 | 8 | ATCCGGAGACACATTCCTGG     | CTGCAAGCAACTTCATCGA       |
| 4               | G11 | umc1913  | 8 | AAACAACATCCATGTGGCTGACC  | CGTTCAAGTACAATTTGGCTCAGTG |
| 4               | G12 | umc2004  | 8 | TTCTTGGTGAGCCACTATTATTGC | AGGCGCTCAGCACTACTACACAT   |

| Plate 4 - Row H |     |          |   |                           |                           |
|-----------------|-----|----------|---|---------------------------|---------------------------|
| 4               | H1  | bnlg1834 | 8 | AAGGTTGGGTGTTGCTATGC      | TAGCTCTGCCACTGGACATG      |
| 4               | H2  | bnlg1863 | 8 | GGCGTTGCTTTTGCACTAAT      | CGACACAGTTGACATCAGGG      |
| 4               | H3  | bnlg2082 | 8 | GACGGAAGGTGGAGCATAGA      | ACGAACGTGATACGGGTCTC      |
| 4               | H4  | bnlg669  | 8 | GCACGCACCAGCAGTCGGCAGT    | CGGCCTAGTGGGCATGGAGCCT    |
| 4               | H5  | umc1457  | 8 | CCCTAGGACACTGGAGGTTACAGA  | GGCTAAGCGTTTTTACAAGTCCAA  |
| 4               | H6  | umc1741  | 8 | AGACGAACCCACCATCATCTTTC   | CGCTTGGCATCTCCATGTATATCT  |
| 4               | H7  | umc1807  | 8 | CAGAAAGTTGCGTTTATGCTACCAC | GGTATTTTCTAATCAACGCTCACTC |
| 4               | H8  | umc1904  | 8 | CAGCCACTCGTTTATGGAGTTTA   | TGTTACTAGTCGATCTGATGCCCA  |
| 4               | H9  | umc1858  | 8 | GTTGTTCTCCTTGCTGACCAGTTT  | ATCAGCAAATTAAGCAAAGGCAG   |
| 4               | H10 | bnlg1176 | 8 | ACTCCTCAAAACCTAGGTGACA    | CACCGATGATGGTGAGTACG      |
| 4               | H11 | bnlg1782 | 8 | CGATGCTCCGCTAGGAATAG      | TGTGTTGGAAATTGACCCAA      |
| 4               | H12 | umc1287  | 8 | ATGGGATGATCATGCTTTCAGTC   | AGAAGGAGGCCCACTACGAGAG    |

| Plate 5 - Row A |     |          |   |                          |                          |
|-----------------|-----|----------|---|--------------------------|--------------------------|
| 5               | A1  | umc1309  | 8 | CTCTCATTAGTTCGTGCCAGTCAA | CCAGAAATCAGAGGAAGCTCTCAG |
| 5               | A2  | umc1343  | 8 | CTTCCTGGCAGCTAACATTACCAT | ATCGGTCTTCCAACAGATCATT   |
| 5               | A3  | umc1562  | 8 | CAAAGCAGTACAATATGACCCAG  | CGTACGTCCCATAAAGATGAGAAA |
| 5               | A4  | umc1882  | 8 | ATCCTTTCGAAATATCCCTTTCA  | AAAAGGTGCGCCACATTGTTTA   |
| 5               | A5  | bnlg1031 | 8 | AATCGGTGAGGCTTCACAAC     | ATGCCTACCTACCACCATGC     |
| 5               | A6  | bnlg1152 | 8 | CGTACCGATTGTTGAATTG      | AAAGTCGTCCGGTCAAATTG     |
| 5               | A7  | bnlg1607 | 8 | TTCGTCCAGATTTTCATTCCT    | CGTCCGTCTTTTCTGAGAG      |
| 5               | A8  | mmc0181  | 8 | CTAATCACCAACCACCAACAC    | AGTCCGTCTCTGTCTCTGTC     |
| 5               | A9  | umc1724  | 8 | GTCTCAAGTGAAACAACCACGCTT | CCACATGAGATGAGATTGCCATT  |
| 5               | A10 | umc1905  | 8 | GGTGTCAACGACAGACTAGCACAT | CATTTCTCTGTGTTGTGTCTGG   |
| 5               | A11 | bnlg1823 | 8 | TGTGACTCCATACCGCACAT     | CTCATCATGTTGTACATGGCG    |
| 5               | A12 | umc1268  | 8 | ACGAACAACCTAGCACAGTCCTAA | CAAGGCGGTTACCAAGTTTACATC |

| Plate 5 - Row B |     |          |   |                           |                          |
|-----------------|-----|----------|---|---------------------------|--------------------------|
| 5               | B1  | umc1384  | 8 | GGCCTAAACTACATGCACACACA   | AGCTTATAAAGGACGGTTCGGTAA |
| 5               | B2  | umc2014  | 8 | CATTTACAGAGCTCTAGAGAGGGA  | AGTACAAGAAGGCATGGAGCTCAG |
| 5               | B3  | phi015   | 8 | GCAACGTACCGTACCTTTCCGA    | ACGCTGCATTCAATTACCGGGAAG |
| 5               | B4  | phi080   | 8 | CACCCGATGCAACTTGCCTAGA    | TCGTACGTTCCACGACATCAC    |
| 5               | B5  | umc1069  | 8 | AGAGAATCCCCAAGCAAACAAAC   | CTTCATCGGAGCCATGGTGT     |
| 5               | B6  | umc1663  | 8 | GCTTGCACTAGCTTTAGCTCCATC  | CGGGATCAGTCGTTACAAACATAG |
| 5               | B7  | dupssr14 | 8 | AGCAGGTACCACAATGGAG       | GTGTACATCAAGGTCCAGATTT   |
| 5               | B8  | umc1638  | 8 | AGGTGACCTCGACGTCCTACG     | GAGGGGAACAAAGACTTGACGTT  |
| 5               | B9  | umc1916  | 8 | AGCTGGCCCTGTTCTTCACAG     | CAACAATTCTGGCCCAACCAAG   |
| 5               | B10 | umc 1370 | 9 | GGGAGCACACACAGTAGTACTCGAT | AGAGGCTCTCCTCTTCAAGCTC   |
| 5               | B11 | umc1279  | 9 | GATGAGCTTGACGACGCCTG      | CAATCCAATCCGTTGACGGTC    |
| 5               | B12 | umc1957  | 9 | CATGATCGCCGGGATTAATACTAC  | GTCCAAGGACGACGATTACGAC   |

| Plate 5 - Row C |     |          |   |                           |                          |
|-----------------|-----|----------|---|---------------------------|--------------------------|
| 5               | C1  | bnlg1583 | 9 | ATCAAGCTTATCGAGAGAGAGAG   | CGACGGTGGAAGACTGC        |
| 5               | C2  | bnlg1724 | 9 | CTGACCCAGAGCATTGTGAA      | GATGAAGAGCTTGACGTCCC     |
| 5               | C3  | bnlg1810 | 9 | ATGCTCCTCCTCTCCTCCAT      | GCGATGATGAGCTGCAAGTA     |
| 5               | C4  | umc1809  | 9 | ACTCTTCTTCTTCCACCGGGAC    | GTCGGACTCGAGAAACGACG     |
| 5               | C5  | umc1867  | 9 | TGGTCTTCTTCGCCGATTAT      | ATAAGCTCGTTGATCTCCTCTCC  |
| 5               | C6  | bnlg1401 | 9 | CACTCGGTTTTTGCTTAGCC      | GTGTCGTCGAGTGCATGC       |
| 5               | C7  | bnlg244  | 9 | GATGCTACTACTGGTCTAGTCCAGA | CTCCTCCACTCATCAGCCTTGA   |
| 5               | C8  | umc1033  | 9 | CTTCTTCGTAAAGGCATTTTGTGC  | GTGCGGGATTCTTGTAGTTTGC   |
| 5               | C9  | umc1037  | 9 | GTGCGCGATTCTTGTAGTTTGC    | CTTCTTCGTAAAGGCATTTTGTGC |
| 5               | C10 | umc1170  | 9 | TGGGTGCTAAACGTAACAACAAA   | GAGGACGAAGCAGAAATCCTACC  |
| 5               | C11 | bnlg430  | 9 | CTTACTGAGCATCTTCTTCTCTCC  | TCCGGTGATGCTCCAGCGAC     |
| 5               | C12 | umc1191  | 9 | AAGTCATTGCCCAAAGTGTTC     | ACTCATCACCCCTCCAGAGTGC   |

| Plate 5 - Row D |     |         |   |                             |                           |
|-----------------|-----|---------|---|-----------------------------|---------------------------|
| 5               | D1  | umc1271 | 9 | CTCTCCTCGTCCGGTAATTAAGC     | GCTTCTTCTTCTGCGCTTCTCT    |
| 5               | D2  | umc1743 | 9 | TGGACTTCGAAAATTCTTTCAGC     | GAGAGGAGGAGCTTCACGAGC     |
| 5               | D3  | umc1921 | 9 | AGATCTCCCTTTTGTAGATGGGG     | AGGGTGCATTTTATTGAGGAGTG   |
| 5               | D4  | umc1492 | 9 | GAGACCCAACCAAACTAATAATCTCTT | CTGCTGCAGACCAATTTGAAATAAC |
| 5               | D5  | umc1519 | 9 | CTCGAGACTCTGTTTCAATCCAAT    | CATGCACGTACTTCCCTGATTTTT  |
| 5               | D6  | umc1771 | 9 | CATCAGGAAGGAAGACGACTAGGA    | GTGAAATGTTGTTTCCAATGCAAG  |
| 5               | D7  | umc1078 | 9 | AGGCACTAGCAGGCGAGAGG        | GCGTAGTAACATCCATCCAACCAA  |
| 5               | D8  | umc1231 | 9 | CTGTAGGGCTGAGAAAAGAGAGGG    | CGACAACCTAGGAGAACCATGGAG  |
| 5               | D9  | umc1357 | 9 | TAGACATGTTGAAACCAGACCG      | ACGACGTCAACAACAGCATGA     |
| 5               | D10 | umc1494 | 9 | CCACAGCAGCTCAGCTCGTC        | GACGACCGCTACTTCTTCAGCA    |
| 5               | D11 | umc1657 | 9 | ATGGATGAATATGATCCACCG       | GATCCGCACGTAGCTTTTCG      |
| 5               | D12 | umc1310 | 9 | AACTCCGAGATCTACGACAACAGC    | GAGGAAGAGTTGGCCAGGATG     |

| Plate 5 - Row E |     |          |    |                          |                            |
|-----------------|-----|----------|----|--------------------------|----------------------------|
| 5               | E1  | umc1366  | 9  | GTCACCTCGTCCGCATCGTCT    | CCTAACTCTGCAAAGACTGCATGA   |
| 5               | E2  | umc1733  | 9  | ACACCCAACTCCCACTGTAAAA   | GATTGGGATTGGGATTGGAAAT     |
| 5               | E3  | bnlg128  | 9  | CACCTGGAGGGACCCATTCC     | AGGACCACAGGATCCATCATCCT    |
| 5               | E4  | bnlg279  | 9  | GCATGCGTACCTTCAAGCTA     | TGTGTTTCATCGGCAATTTTG      |
| 5               | E5  | umc1104  | 9  | CAACAATTCCAATCATGGCACTAA | GTAACCTCTGGTGAAGCTCAGAGGGC |
| 5               | E6  | umc1277  | 9  | TTTGAGAACGGAAGCAAGTACTCC | ACCAACCAACCACTCCCTTTTATG   |
| 5               | E7  | umc1675  | 9  | GTTCTTCCTCTTCCCATCAGTCT  | ATAGCTGCGCGTAAAGCAACC      |
| 5               | E8  | umc1714  | 9  | CAAGGGCTCTTGCTCTTGAACATA | CGACGACCTTAATTGTGTTCTTT    |
| 5               | E9  | umc1804  | 9  | GCGGCGAGGTTAAAGGAAAA     | GGTGTTTAGACACGCAGACACAAC   |
| 5               | E10 | umc1137  | 9  | ATCAGTCACTCTTCTGCCTCCACT | GGCTGGATAATGTTGTAGCTGGTC   |
| 5               | E11 | umc 1982 | 9  | TTCATCTTCTAGTCTCGTCTCCG  | AATCGTACTTGGAGGAGGCGTT     |
| 5               | E12 | phi 041  | 10 | TTGGCTCCCAGCGCCGCAAA     | GATCCAGAGCGATTTGACGGCA     |

| Plate 5 - Row F |     |         |    |                             |                          |
|-----------------|-----|---------|----|-----------------------------|--------------------------|
| 5               | F1  | phi117  | 10 | ATCGGATCGGCTGCCGTCAAA       | AGACACGACGGTGTGTCCATC    |
| 5               | F2  | umc1293 | 10 | GATCTCGATCTGCTTCATCATCTG    | GTATCCGTTTCTCATGCAACACAC |
| 5               | F3  | umc1380 | 10 | CTGCTGATGTCTGGAAGAACCT      | AGCATCATGCCAGCAGGTTTT    |
| 5               | F4  | umc1319 | 10 | TGAGAGCCACCTTCTTGAGCTACT    | TTCTTGAAGGCGAAGGTAGGTAT  |
| 5               | F5  | umc2018 | 10 | TAGCCAAGCTTCTCCCTAGCTTTT    | GCAGTTGGAGGAGGAGCAGAC    |
| 5               | F6  | phi059  | 10 | AAGCTAATTAAGGCCGGTCATCCC    | TCCGTGTACTCGGCGGACTC     |
| 5               | F7  | umc1337 | 10 | TGGATCTTTTATTTATGTTTTATTCCG | CTGCCGTGAACGAATATGAATGC  |
| 5               | F8  | umc1432 | 10 | GGCCATGATACAGCAAGAAATGAT    | TACTAGATGATGACTGACCCAGCG |
| 5               | F9  | bnlg210 | 10 | GCCTCGCACCAAGACATAATA       | TGCCCCATTTGAGTAGACTTC    |
| 5               | F10 | phi050  | 10 | TAACATGCCAGACACATACGGACAG   | ATGGCTCTAGCGAAGCGTAGAG   |
| 5               | F11 | umc1179 | 10 | AGCTCCCCATCTTAATCCGTAAA     | ATTGAGCTCGGCGTAGAAAAA    |
| 5               | F12 | umc1336 | 10 | GTACAAATGATAAGCAAGGGGCAG    | CTCTGTTTTGGAAGAAGCTTTTGG |

| Plate 5 - Row G |     |          |    |                          |                          |
|-----------------|-----|----------|----|--------------------------|--------------------------|
| 5               | G1  | umc1367  | 10 | TGGACGATCTGCTTCTTCAGG    | GAAGGCTTCTCTCTCGAGTAGGTC |
| 5               | G2  | umc1962  | 10 | ATAAGTGGGGGAGGCGAGCTA    | GAGAACCAACCACCAAGAAGTCC  |
| 5               | G3  | umc2016  | 10 | AGAGACGACATGTCTATCCTTGCC | ATTGCATTGCATTGAGCTGTTGT  |
| 5               | G4  | bnlg1518 | 10 | AGCTGTACACGCAAGTAGCCA    | GGCTCTGTTAATTCCGATCGC    |
| 5               | G5  | bnlg1526 | 10 | ACGAGCGAGTGGAGAATAGG     | AGCCAGTACGTGGGGTC        |
| 5               | G6  | umc1077  | 10 | CAGCCACAGTGAGGCACATC     | CAGAGACTCTCCATTATCCCTCCA |
| 5               | G7  | umc1115  | 10 | TGGAAGGGGATATCAGGATTTAGA | TGTGATGACCATGAATGTAAGCTG |
| 5               | G8  | umc1330  | 10 | AGCAAAGAAGCCAAAGAGCAACT  | GTCACCACCGTCTGCTGGTA     |
| 5               | G9  | umc1930  | 10 | TCTTCTCCAAGTGTGTTAATGCC  | CACACAGTGAGTCGTTTCTTCGT  |
| 5               | G10 | umc1995  | 10 | AAACAATTGTCATCTTCTCTGCG  | GTCAGACCGACGCACTCACTAA   |
| 5               | G11 | bnlg1250 | 10 | CCATATATTGCCGTGGAAGG     | TTCTTCATGCACACAGTTGC     |
| 5               | G12 | umc1045  | 10 | GCTCGTCCATGAGCAGCATC     | AAGCTGAAGATGCGGAGGTTG    |

| Plate 5 - Row H |     |          |    |                             |                          |
|-----------------|-----|----------|----|-----------------------------|--------------------------|
| 5               | H1  | umc1402  | 10 | TACACGCAGCTCTGGGTTTTG       | GTGATCCGGGTAGAGGAATGTG   |
| 5               | H2  | umc1506  | 10 | AAAAGAAACATGTTCACTGAGCG     | ATAAAGGTTGGCAAACGTAGCCT  |
| 5               | H3  | bnlg2190 | 10 | TCCTCCTTCATCCCTTCTT         | CCAGTATCATTGCCCAATC      |
| 5               | H4  | bnlg594  | 10 | CGAGCGCTTTGCGAGTACCAGTACACA | CTGCGTGCGTCCAGCCTCCACT   |
| 5               | H5  | umc1061  | 10 | AGCAGGAGTACCCATGAAAGTCC     | TATCACAGCAGCAAGCGATAGATG |
| 5               | H6  | umc1993  | 10 | CTTTTCTGCTACTCCTGCGTGC      | CTAGCTGATGGAGGCTGTAGCG   |
| 5               | H7  | bnlg1185 | 10 | CGGTCCAGGCAGGTTAATTA        | GACTCGAGGACACCGATTTC     |
| 5               | H8  | bnlg1360 | 10 | TCTGCTCATCCACAACCTTGC       | AGAACGTGAAGCTGAGCGTT     |
| 5               | H9  | bnlg1450 | 10 | ACAGCTCTTCTTGGCATCGT        | GACTTTGCTGGTCAGCTGGT     |
| 5               | H10 | umc1038  | 10 | CGTCACACTCCTCTGCCACTT       | GAGGATTCAGAACTCGACTCGG   |
| 5               | H11 | umc1084  | 10 | GATAAAAAGGCAAGTGCAACAAGG    | ATATCAACCAGAGGCTGGAACCTG |
| 5               | H12 | umc1196  | 10 | CGTGCTACTACTGCTACAAAGCGA    | AGTCGTTCTGTCTTCCGAACT    |